

Specifications: Powerlink 42KVA Generator

Date of Manufacture	May-17
Prime Rating kVA	42
Current Engine Hours	28,773 Hours
Make	Powerlink
Model	GMS42CS-AU
Serial No.	SAU0085/2
Engine Make	Cummins
Engine model	4BT3.9-G1
Engine serial	78474856
Engine CPL	3115
Cylinders	4
Governor	Mechanical
RPM	1500
Service hours	400
Air filter	AF4327
Fuel filter 1	FF5018
Oil filter full flow	LF3345
Oil capacity	11 Litres
Coolant capacity	10 Litres
Starter Motor 12/24v	Cummins DCEC 5336432
DC Alternator 12/24v	Cummins DCEC 4938600 24V
Fan belt	8PK1445
Alternator model	Stamford PI144K1
Alternator serial	X17J421037
AVR	AS480
Control panel	DeepSea 7420
Main Circuit Breaker	ABB GSH204 AC
Earth Leakage Type	Broyce Control ELRM44V-30
Outlets Fitted	2x32A + 2x15A
Battery	1 x Delkor NX110-5LMF
Fuel Type	DIESEL
Fuel cons @ 75%	10l/hr
Fuel capacity	270 Litres
Avge noise @ 7m	67 db(a)
Length	2588 mm
Width	1081 mm
Height	1709 mm
Approx wet weight	1600 kgs

GENERATOR LOAD TEST REPORT

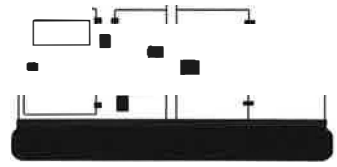
GENERATOR CHANGEOVER TEST

WO / JOB NO: Load Test Report	DATE: 10/04/2026
ENGINE TYPE: Cummins 4BT3.9-G1	SERIAL NO: 78474856
ALTERNATOR TYPE: Stamford PI144K1	SERIAL NO: X17J421037
SET SIZE / MODEL: 42KVA Powerlink GMS42CS-AU	SERIAL NO: SAU0085/2
CLIENT:	

Time	Load (KW)	Eng Hrs	Voltage			Amps			HZ	Eng Temp °C	Oil Pres PSI/ KPA	Oil Temp °C	Ambient Temp/ Smoke Level °C
			U	V	W	U	V	W					
1150	0	28772	419	419	420	0	0	0	49.5	41	5BAR	32	30
1155	18		418	418	418	26	24	24	48.1	56	4.6	55	30
1200	32		420	420	420	45	45	45	50.1	76	4.5	68	30
1205	34		420	420	420	47	47	47	50.0	81	4.3	80	30
1210	34		420	420	420	47	47	47	50	82	4.1	84	30
1215	34		420	420	420	47	47	47	50	82	4.1	89	30
1220	35		420	420	420	47	47	47	50	83	4.1	92	30
1225	34		420	420	420	47	47	47	50	83	4.1	91	30
1230	34		420	420	420	47	47	47	50	85	4.0	92	30
1235	34		420	420	420	47	47	47	50	84	4.0	92	30
1240	34		420	420	420	47	47	47	50	84	4.0	93	30
1245	34		420	420	420	47	47	47	50	84	4.0	92	30
1250	0	28773	420	420	420	0	0	0	52.5	77	4.1	82	30

COMMENTS: Engine speed was adjusted to 52.2hz no load at 11:58, then testing recommenced.

TESTED BY: Brisbane Workshop SIGNED 10/04/2026



Generator set
Sound-proof type
GMS42CS-AU

SPECIFICATIONS



EC series
GMS42CS-AU
50 Hz @ 1500rpm,3-phase/5-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009
- AS 3000-1997
- AS 3010.1-1988

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 90%.
- Altitude: Below one thousand (1000) meters above sea level.

Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

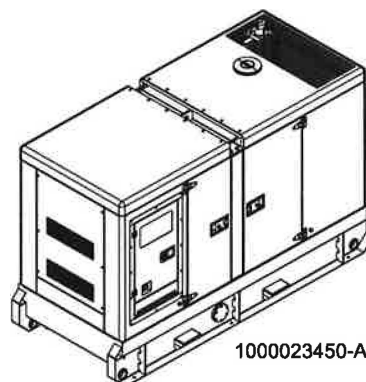
2 General Features

- Cummins engine 4BT3.9G1
- Close coupled to a Stamford alternator PI144K
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 80A
- Rotate speed governor: Mechanical governor
- Excitation System: Self Excited SHUNT
- A.V.R.Model: AS480
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector

- 2x12V/70AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 21 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data

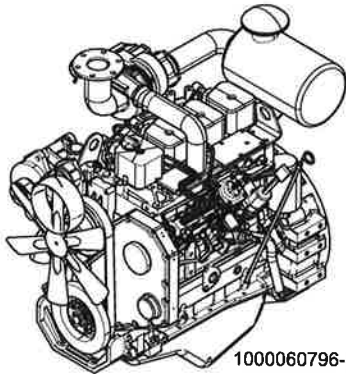


Model.....	GMS42CS-AU
Structure type.....	R
Tank capacity.....	270L
Dry weight.....	1398kg
Sound pressure level @1m/ 7m	N/A
Sound power level acc. 2000/14/EC	N/A
Dimensions L×W×H.....	2588x1081x1709mm
Standby Power	47kVA/37kW
Prime Power.....	43kVA/34kW
Voltage/Ampere.....	415V/59.8A

Genset Fuel Consumption

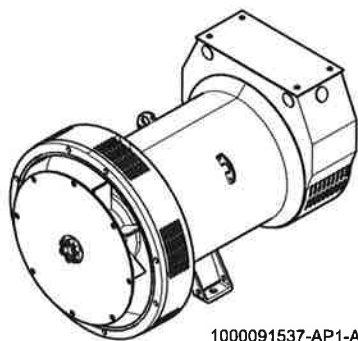
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.0	7.5	10.0	13.0	14.0

Power System



1000060796-S-AP1-B7

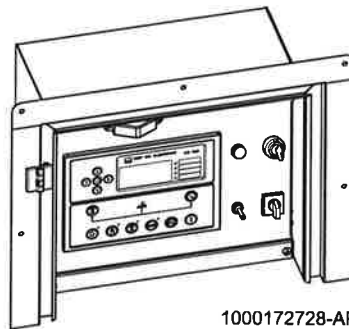
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BT3.9G1
Dimensions L×W×H.....	N/A
Dry Weigh (approx.).....	321kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke.....	120mm
Displacement.....	3.9L
Compression Ratio.....	N/A
Type of injection.....	Direct injection
Intake System.....	Turbo charged
Intake Resistance.....	6.2kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12/24V
Type of Fuel.....	No.2 or ASTM D2
Type of Oil.....	API CD/SE or CCMCD4
Oil Capacity.....	10.9L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	20.8L
Back Pressure.....	≤10.1kPa
Standby Power.....	40kW
Prime Power.....	36kW
Fuel Consumption(100%load).....	214g/kW.h



1000091537-AP1-A1

Alternator Manufacturer/Brand.....	Stamford
Alternator Model.....	PI144K
Exciter.....	Brushless
Cooling Fan.....	Plastic
Windings.....	100% copper
Insulation Class.....	H
Winding Pitch.....	2/3
Terminals.....	12
Drip Proof.....	IP23
Altitude.....	≤1000m
Overspeed.....	2250rpm
Air Flow.....	0.135m³/s(50HZ),0.165m³/s(60HZ)
Voltage Regulation.....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-7420 Control System



1000172728-AP1-C4

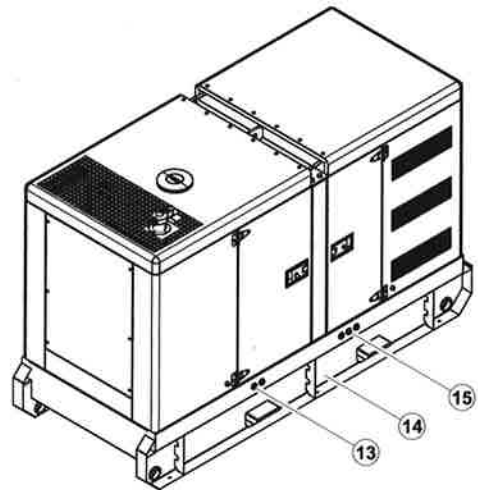
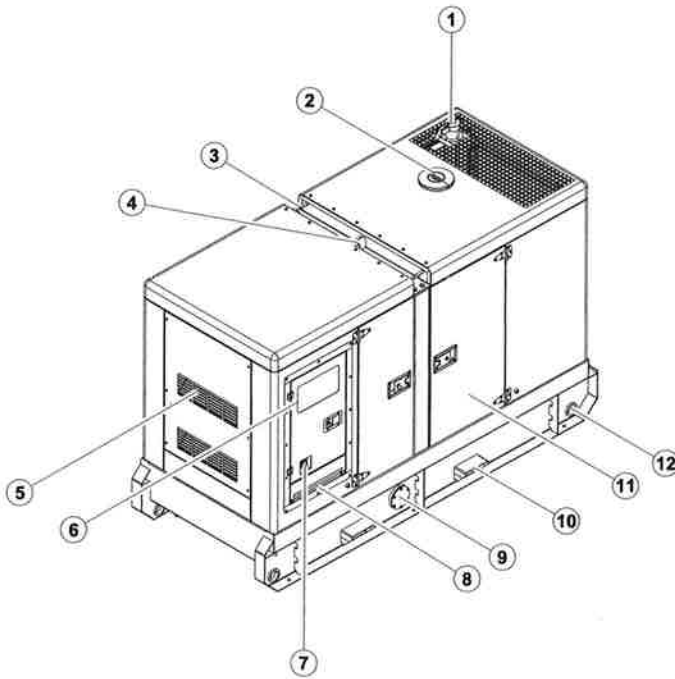
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

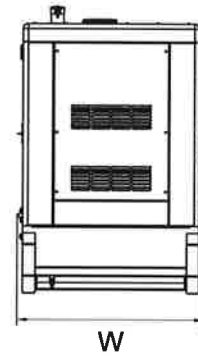
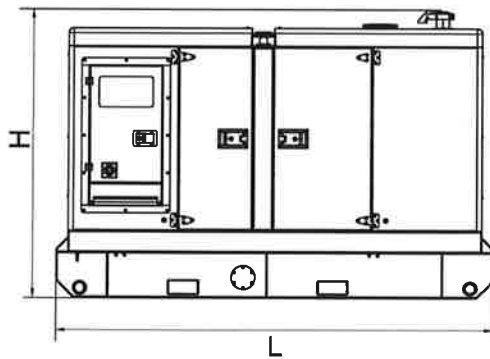
4 Overall Dimensions

1000023450-DR1-D4

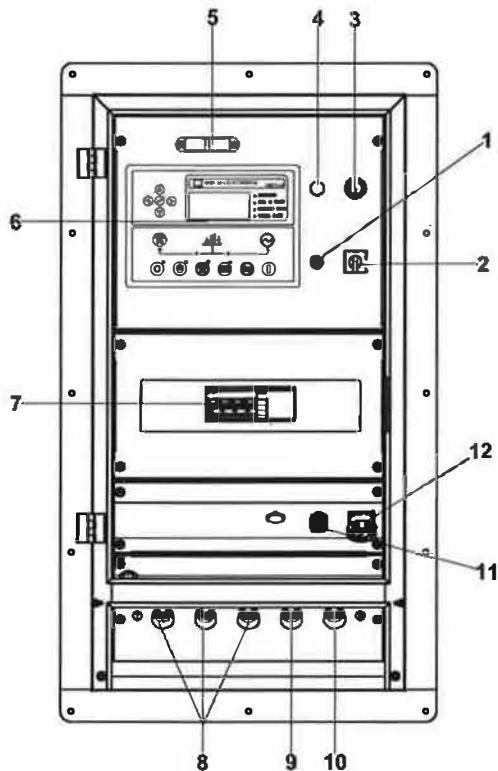
Dry weight	1398kg
Fuel tank capacity	270L
Dimensions L x W x H	2588x1081x1709mm



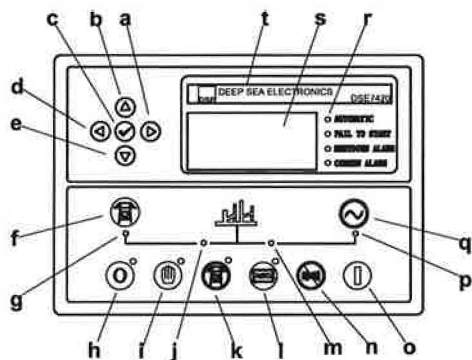
- ⑧ Cable trench
- ⑦ Emergency stop switch
- ⑥ Control cabinet
- ⑤ Air inlet
- ④ Lifting lug
- ③ Roping lug
- ② Coolant inlet
- ① Exhaust gas outlet
- ⑮ Coolant/Oil drain hose fitting
- ⑭ Base frame
- ⑬ External fuel inlet/return hose fitting
- ⑫ Tie down
- ⑪ Access door
- ⑩ Fork lift channel
- ⑨ Fuel drain



5 Control System



Control & Field wiring cabinet

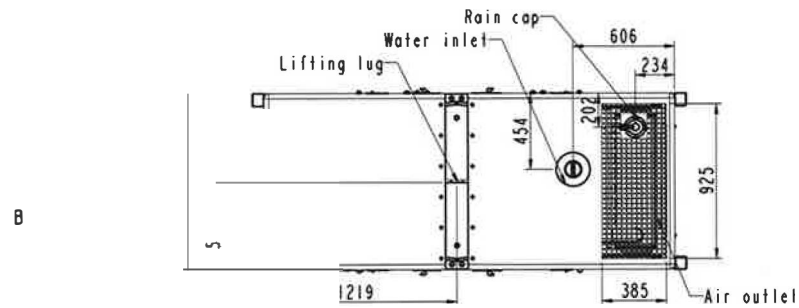
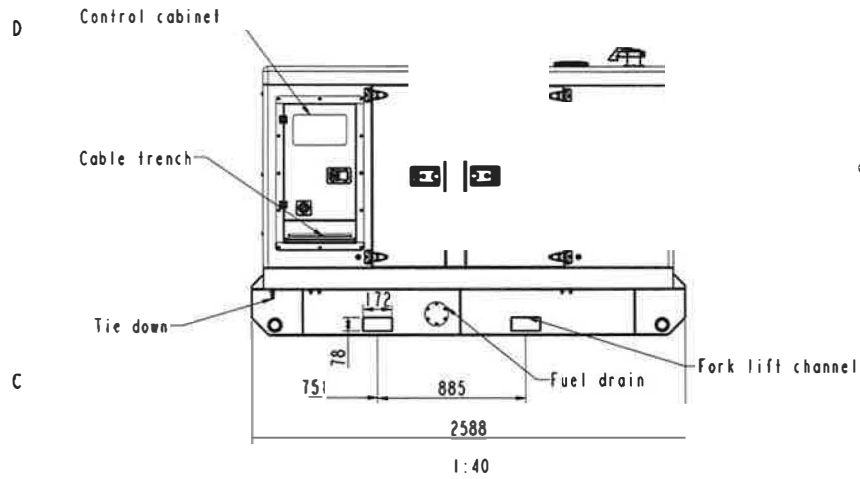


Control module

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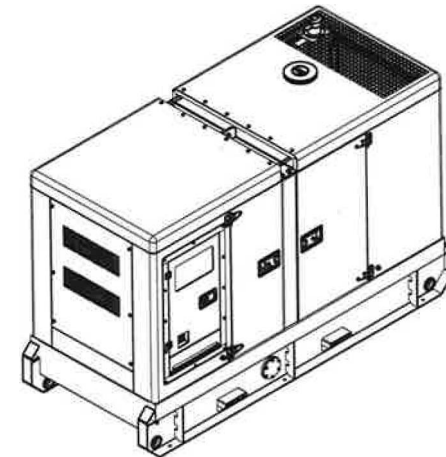
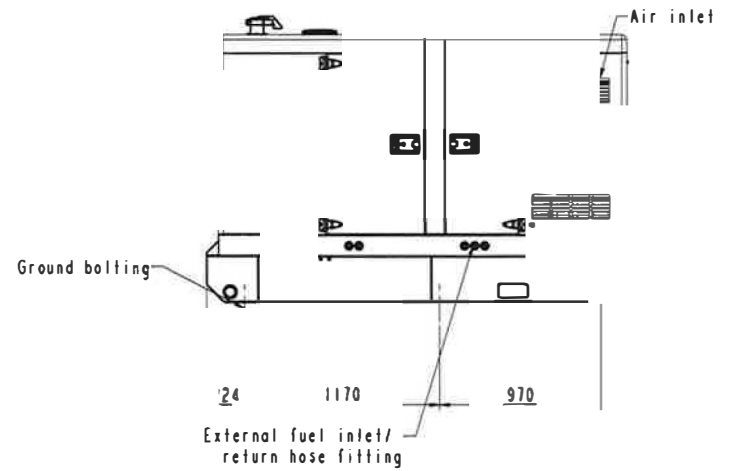
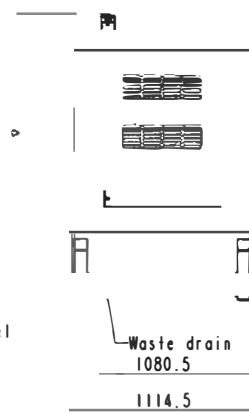
Ref.	Description
1	Control cabinet lamp switch
2	Mains input changeover switch
3	Charge indicator
4	Key switch
5	Control cabinet lamp
6	Control module
7	Main circuit breaker
8	Live wire terminals
9	Neutral wire terminal
10	Ground wire terminal
11	Remote communication interface
12	ATS communication interface

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	Mains supply available LED
h	Stop / Reset button
i	Manual button (Manual control mode)
j	Mains supply on load LED
k	Test button (Test mode)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	Button (transfer the load to the genset, when in Manual mode only)
r	Alarm LED (4 alarm items)
s	LCD display
t	Control module name



A

DIMENSIONS mm	LxWxH	FUEL TANK CAPACITY L	DRY WEIGHT kg
2588x1115x1710		270	1397.73



D

C

B

A

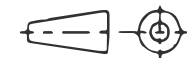
/Appellation Sound-proof type generator set

Edition: FIRST ANGLE PROJECTION

/Drg.No. 1000023450

D

Designer: 1064 Collate: 0705 Auditing: 0705



Material

/Weight(Kg):1397.73

/Scale:

/Date:2012-07-24

1:25

Technics:

Standardization:

Authorize: 0705

/Sheet: 1/2

